

Notice of Allowability

Application No.

10/017,560

Examiner

Kimbinh T. Nguyen

Applicant(s)

REPIN ET AL.

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 5/5/04.
2. ☒ The allowed claim(s) is/are 3-6,8-13,16-19 and 21-27.
3. ☒ The drawings filed on 14 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This action is responsive to amendment filed 05/05/04.
2. Claims 3-6, 8-13, 16-19 and 21-27 are pending in the application.

Reasons For Allowance

3. The following is an examiner's statement of reasons for allowance:

Claims 3, 5, 12, 16, 18 and 25, the prior art does not teach the volume rendering comprising: setting the revised value of opacity closest to the light source of voxels in each cell equal to initial value of opacity, setting the revised value of all other voxels in each cell equal to the revised value of an adjacent voxel in the same group that is closer to the light source if the revised value of the closer voxel is equal to or greater than the initial value of opacity of the adjacent other voxel and setting the revised value of the adjacent other voxel equal to initial value if the revised value of the closer voxel is less than the initial value of opacity of the adjacent other voxel, combining the revised values opacity in each cell to derive three orthogonal opacity gradient components in the center of each cell; combining three orthogonal opacity gradient in the center to derive an opacity gradient that is normal to an isosurface passing the voxel in the center, combining the revised values of opacity for the voxels in each cell to derive three orthogonal opacity gradient components for the voxel in the center of each cell: and combining the three orthogonal opacity gradient components for the voxel in the center of each cell to derive an opacity gradient that is normal to an isosurface passing through the voxel in the center of each cell.

Claims 8, 21, 27, the prior art does not teach setting the revised value of opacity closest to the light source of voxels in each cell equal to initial value of opacity, setting the revised value of all other voxels in each cell equal to the revised value of an adjacent voxel in the same group that is closer to the light source if the revised value of the closer voxel is equal to or greater than the initial value of opacity of the adjacent other voxel and setting the revised value of the adjacent other voxel equal to initial value if the revised value of the closer voxel is less than the initial value of opacity of the other voxel,

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

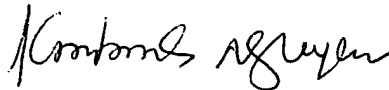
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2671

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 25, 2005



KIMBINH T. NGUYEN
PRIMARY EXAMINER